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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/791,212	JONES ET AL.	
	Examiner	Art Unit	
	ADAM DUDA	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Examiner acknowledges the receipt of Applicants Arguments/Remarks received on 03/09/2009.

Response to Arguments mailed 03/09/2009

Applicant Argues That:
Applicant argues, on page 12, that since dependent claim 22 depends on claim 14 it is, at least by virtue, allowable. Furthermore, applicant only argues limitations of independent claim 14.
Examiner Respectfully Agrees:

1. Applicant's arguments, see REMARKS, filed 03/09/2009, with respect to 35 USC 112, first paragraph have been fully considered and are persuasive. The 35 USC 112, first paragraph REJECTION of claim 1 has been withdrawn.

2. With respect to independent claim 1, applicant argues that Hodge, Cisco SOHO 90, and Deeths, individually or in combination, do not disclose or suggest the specific combination of claim 1. That is, they fail to disclose or suggest "a plurality of device nodes that include at least one of an alarm system, an alarm clock, and an oven" as recited in claim 1. Applicant argues so on page 8 and 9 of the REMARKS dated 03/09/2009. Applicant argues, on page 12, that since dependent claim 5 depends on claim 1 it is, at least by virtue, allowable. Furthermore, applicant only argues limitations of independent claim 1. Applicant also provides the same arguments using the

dependency of claim 3 on independent claim 1 and arguing the limitation of independent claim 1 – see page 11.

3. With respect to independent claim 14, applicant argues that Hodge, Cisco SOHO 90, and Deeths, individually or in combination, do not disclose or suggest the specific combination of claim 14. That is, they fail to disclose or suggest “a plurality of device nodes that include at least one of an alarm system, an alarm clock, and an oven" as recited in claim 1. Applicant argues so on page 9 and 10 of the REMARKS dated 03/09/2009. Applicant argues, on page 12, that since dependent claim 22 depends on claim 14 it is, at least by virtue, allowable. Furthermore, applicant only argues limitations of independent claim 14.

4. With respect to independent claim 28, applicant argues that Hodge, Cisco SOHO 90, and Deeths, individually or in combination, do not disclose or suggest the specific combination of claim 28. That is, they fail to disclose or suggest “a plurality of device nodes that include at least one of an alarm system, an alarm clock, and an oven" as recited in claim 1. Applicant argues so on page 10 and 11 of the REMARKS dated 03/09/2009. Applicant argues, on page 12, that since dependent claim 30 depends on claim 28 it is, at least by virtue, allowable. Furthermore, applicant only argues limitations of independent claim 28. Applicant also provides the same arguments using the dependency of claims 32 and 33 on independent claim 28 and arguing the limitation of independent claim 28 – see page 13.

In response to the arguments with respect to independent claims 1, 11, and 28 and their dependents of 5, 22, 28, 3, 32 and 33. The term “Computer Premises Equipment (CPE)” is defined in paragraph 0018. The sentence states:

> “Examples of pieces of CPE may include home appliances, kitchen appliances, consumer electronic devices, computers, microwave ovens, conventional ovens, video recorders, alarm clocks, air conditioning systems, heating systems, alarm systems, and Voice over Internet Protocol (VoIP) telephones” therefore pieces of equipment residing on the customer premises.

Further, the definition of “Computer Premise Equipment” is:

> “Terminal equipment – telephones, key systems, PBXs, modems, video conferencing devices, etc – connected to the telephone network and residing at the customer’s premises.” (Newton’s Telecom Dictionary – “Computer Premises Equipment)
>
> “Customer premises equipment or customer provided equipment (CPE) is any terminal and associated equipment located at a subscribers premises and connected with a carrier’s telecommunication channel(s) at the demarcation point (“demark”)” wherein "In the context of telecommunications, a terminal is a device which is capable of communicating over a line" (see Wikipedia.org – “Customer Premises Equipment” and “terminal”)

Therefore, by using the term “computer premises equipment” one means a piece of equipment connect to a communication network on the customer side. Thus by stating “customer premise equipment” based on the Newton's Telecom Dictionary and Wikipedia.org one means a toilet local on the customer premises connect to the network. Further, when one states “computer premise equipment” one means a desk located on the customer premises connect to the provider network. Base don these definitions one of ordinary skill in the art at the time of the invention would know that customer premises equipment is an oven (an oven at the customer premises connected to the provider network), an alarm system (an alarm system at the customer premises connected to the provider network), or an alarm clock (an alarm clock at the customer premises connected to the provider network). Applicant’s arguments are irrelevant.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 recites the limitation "the requesting device". There is insufficient antecedent basis for this limitation in the claim.

As a result, the argued features read up the references as follows.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-21, 23-29, 31, and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge et al. (U.S. 6,438,702 B1) in view of Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages and further in view of Deeths (“Using NTP to Control and Synchronize System Clocks”).

Hodge discloses:

Regarding claim 1, a method of clock setting comprising (see Hodge; Abstract; the time synchronization, therefore clock setting): receiving a time synchronization request at a home network node (see Hodge; Abstract; time synchronization request is received by customer premise equipment, therefore a network node, a computer), the plurality of device nodes including at least one of an alarm system, an alarm clock, and an oven (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore a clock equipment connected to the network on the customer premises; Applicant's specification on pages 6 and 7 define computer premise equipment (CPE) as "may include home appliances, kitchen appliances, consumer electronic devices, computers, microwave ovens, conventional ovens, video recorders, alarm clocks, air conditioning systems, heating systems, alarm systems, and voice over Internet Protocol (VoIP) telephones" thus one of ordinary skill at the time of the invention would use the term CPE to describe such equipment that resides on the customer premise and is connected to the network. Therefore, by the definition of CPE Hodge does disclose Voice over Internet Protocol (VoIP) telephones.);.

Regarding claim 8, the method, wherein the different node comprises a piece of Internet Protocol enabled Customer Premises Equipment (IP-enabled CPE) (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore computer equipment connected to the network on the customer premises, is present)

Regarding claim 9, the method, wherein the IP-enabled CPE is selected from a group consisting of a telephone, a clock, a kitchen appliance, a television, a game console, and a Set Top Box (STB) (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore equipment connected to the network on the customer premises, is present and time synchronized with the network provider's time server).

Regarding claim 12, receiving time synchronization requests at the home network node (see Hodge et al.; col. 4 lines 32-65; retrieval of time synchronization requests at the computer premise equipment, the home network node).

Hodge et al. does not specifically disclose:

Regarding claim 1, receiving a time synchronization request at a home network node comprising a web server; and outputting a time signal to a requesting device via a home network, the requesting device comprising one of a plurality of device nodes of the home network;

Regarding claim 2, wherein the home network node further comprises a Network Time Protocol (NTP) server.

Regarding claim 4, wherein the home network node further comprises a router, further comprising establishing the home network with the router.

Regarding claim 6, further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer.

Regarding claim 7, receiving at the home network node a network timing signal via a cable modem termination system.

Regarding claim 10, further comprising utilizing a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) to respond to the time synchronization request.

Regarding claim 11, further comprising: recognizing the time synchronization request with a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.); accessing information from a Network Time Protocol (NTP) server (i.e. a switch or router running NTP) executing at the home network node, the information representing a Coordinated Universal Time value; and including a representation of the information in the time signal.

Regarding claim 12, outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network.

Regarding claim 13, further comprising: receiving another time synchronization request at the home network node outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network.

SOHO 90 Series more specifically discloses:

Regarding claim 1, receiving a time synchronization request at a home network node comprising a web server (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”; a home and small office router that is computer premise equipment, therefore equipment located on the customer network premises, such as web server, as a result contains a http daemon, that recognizes network time protocol synchronization requests, thus receiving time synchronization requests); and outputting a time signal to a requesting device via a home network, the requesting device comprising one of a plurality of device nodes of the home network (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”; simple network time protocol server and client support, therefore network time protocol information is gathered from a remote NTP server while listening for customer premise equipment’s, such as a home network client, time signal requests).

Regarding claim 2, wherein the home network node further comprises a Network Time Protocol (NTP) server (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4: Protocols and features

Supported by Cisco SOHO 90 Series Routers"; the router supports functionality to be a network time protocol server).

Regarding claim 4, wherein the home network node further comprises a router, further comprising establishing the home network with the router (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; a router which establishes a home or small office network).

Regarding claim 6, further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 "Table 5"; a router that is digital subscriber line access multiplexer (DSLAM) interoperable).

Regarding claim 7, receiving at the home network node a network timing signal via a cable modem termination system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; a NTP compatible router that connects to the internet using a cable or DSL modem, therefore receives a network timing signal via a cable modem termination system).

Regarding claim 10, further comprising utilizing a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) to respond to the time synchronization request (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols

and Features Supported by Cisco SOHO 90 Series Routers"; a router that is a web server, therefore contains a http daemon, that recognizes network time protocol synchronization requests).

Regarding claim 11, further comprising: recognizing the time synchronization request with a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.; see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a router that is a web server that recognizes time synchronization requests); accessing information from a Network Time Protocol (NTP) server (i.e. a switch or router running NTP) executing at the home network node, the information representing a Coordinated Universal Time value (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a network time protocol, therefore information sent is representing a Coordinated Universal Time); and including a representation of the information in the time signal (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; network time protocol data represent time signal data).

Regarding claim 12, outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network

(see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP server, therefore sending time synchronization information to different requesting computer premise equipment on the home or small office network).

Regarding claim 13, further comprising: receiving another time synchronization request at the home network node (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP client, therefore receiving time synchronization requests at the home or small office network node) and outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP server, therefore sending time synchronization information to different requesting computer premise equipment on the home or small office network).

Deeths more specifically discloses:

Regarding claim 1, broadcasting time signals from the web server (i.e. server) to nodes of the home network (i.e. clients) without being prompted by a requesting device (see Deeths; page 7 "Types of Clients and Servers";

"Broadcast/multicast server – An NTP server can also operate in a broadcast or multicast mode. Both work similarly; broadcast servers send periodic time updates to a broadcast address, while multicast servers send periodic updates to a multicast address. Using broadcast packets can greatly reduce the NTP traffic on a network, especially for a network with many NTP clients"; page 7 "Types of Clients and Servers"; "Broadcast/multicast client – An NTP broadcast or multicast client listens for NTP packets on a broadcast or multicast address. When the first packet is received, it attempts to qualify the delay to the server in order to better quantify the correct time from later broadcasts. This is accomplished by a series of brief interchanges where the client and serer act as a regular (non-broadcast) NTP client and server. Once these interchanges occur, the client has an idea of the network delay and thereafter can estimate the time based only on broadcast packets. If this interchange is not desirable, it can be disabled using NTP's access control features." thus a disclosure of a broadcast server which "send periodic time updates to a broadcast address" and broadcast client which "listens for NTP packets on a broadcast or multicast address" therefore a server communicating timing information without being prompted by a request from a home network device (i.e. client) which listens to broadcasts from a server).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Cisco SOHO 90 Series

Secure Broadband Router Data Sheet, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Deeths, thereby creating satisfying the critical need for synchronized time in today's network environment (see Deeths; page 1 "Introduction"); using NTP which is a good choice for time synchronization in a variety of circumstances (see Deeths; page 3); and using a time protocol what is designed specifically for Internet environments (see Deeths; page 3); and using broadcast packets can greatly reduce the NTP traffic on a network, especially for a network with many NTP clients (see Deeths; page 7).

Hodge discloses:

Regarding claim 14, a time adjustment system (see Hodge et al.; Abstract; a time synchronization system, therefore time adjustment system), the plurality of home network device nodes including at least one of an alarm system, an alarm clock, and an oven (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore a clock equipment connected to the network on the customer premises; Applicant's specification on pages 6 and 7 define computer premise equipment (CPE) as "may include home appliances, kitchen appliances, consumer electronic devices, computers, microwave ovens, conventional ovens, video recorders, alarm clocks, air conditioning systems, heating systems, alarm systems, and voice over Internet Protocol (VoIP) telephones" thus one of ordinary skill at the time of the invention would use the term CPE to describe such equipment that resides on the customer premise and is connected to the network. Therefore, by the definition of CPE Hodge does disclose Voice over Internet Protocol (VoIP) telephones.).

Regarding claim 18, the system, further comprising the home network node, wherein the home network node comprises a Voice over Internet Protocol (VoIP) telephone (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore Voice over Internet Protocol (VoIP) telephone equipment connected to the network on the customer premises).

Regarding claim 21, the system, wherein at least one of the plurality of home network device nodes comprises a piece of Internet Protocol enabled

consumer electronic equipment (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore IP enabled equipment connected to the network on the customer premises).

Regarding claim 25, the system, further comprising a plurality of home network nodes (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore equipment connected to the network on the customer premises, is present).

Hodge et al. does not specifically disclose:

Regarding claim 14, a time adjustment system comprising: a housing component at least partially defining an external surface and an internal cavity; a broadband modem component at least partially located within the internal cavity; a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem, the home networking mechanism operable to facilitate providing each of a plurality of home network device nodes with access to a backhaul enabled by the broadband modem, a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory; and the memory comprising instructions operable to direct the processor to execute a web server, to receive a timing signal from a remote Public Internet time code protocol server, and to communicate time information representing the timing signal to each home network device node via the home networking mechanism.

Regarding claim 15, further comprising a network operator access concentrator (i.e. a device that allows for communication between two devices) communicatively coupled to the broadband modem and operable to pass the timing signal.

Regarding claim 16, wherein the access concentrator (i.e. a device that allows for communication between two devices) comprises a digital subscriber line access multiplexer.

Regarding claim 17, the access concentrator comprises a cable modem termination system.

Regarding claim 23, wherein the broadband modem comprises an xDSL modem.

Regarding claim 24, wherein the broadband modem comprises a cable modem.

Regarding claim 26, the system wherein the memory comprises instructions operable to direct the processor to broadcast the time information to each of the plurality of home network device nodes.

Regarding claim 27, the system further comprising a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) operable to receive a request for the time information from each of the home network device nodes.

Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses:

Regarding claim 14, a time adjustment system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 “Table 4 Protocols and

Features Supported by Cisco SOHO 90 Series Routers"; router runs network time protocol client and server to provide time adjustment functionality), comprising: a housing component at least partially defining an external surface and an internal cavity (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 Figure 1 "SOHO 90 Series Secure Broadband Routers"; a housing component with an external surface and an internal cavity); a broadband modem component at least partially located within the internal cavity (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; a integrated broadband ADSL WAN port, a broadband modem component); a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 1 Figure 1 "SEOHO 90 Series Secure Broadband Routers"; a home and small office networking router, a networking mechanism, located within the internal cavity with integrated broadband ADSL WAN port, a broadband modem component), the home networking mechanism operable to facilitate providing each of a plurality of home network device nodes with access to a backhaul enabled by the broadband modem (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 1 "Secure Internet Access"; page 1 "Easy Set Up and Deployment"; the networking router, a

networking mechanism, enables broadband connection sharing by the broadband modem), ; a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 Table 2 “Cisco SOHO 90 Series Hardware Specification”; a router processor from the router, therefore located within the internal cavity and in communication to the memory and broadband modem) the memory comprising instructions operable to direct the processor to execute a web server (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; the router is a web server, therefore the memory comprises instructions operable to direct the processor), to receive a timing signal from a remote Public Internet time code protocol server (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; router supports being a network time protocol server and client, thus receiving a timing signal), and to communicate time information representing the timing signal to each home network device node via the home networking mechanism (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; router supports being a

network time protocol client and server, thus communicating time information to the home or small office network) .

Regarding claim 15, further comprising a network operator access concentrator (i.e. a device that allows for communication between two devices) communicatively coupled to the broadband modem and operable to pass the timing signal (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 “Table 5”; network time protocol is a client and server therefore receives timing signal through broadband connection, therefore communication between the broadband modem and timing signal exists).

Regarding claim 16, wherein the access concentrator (i.e. a device that allows for communication between two devices) comprises a digital subscriber line access multiplexer (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 “Table 5”; a router that is digital subscriber line access multiplexer (DSLAM) interoperable).

Regarding claim 17, the access concentrator comprises a cable modem termination system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; a NTP compatible router that connects to the internet using a cable or DSL modem, therefore receives a network timing signal via a cable modem termination system).

Regarding claim 23, wherein the broadband modem comprises an xDSL modem (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 7 “SOHO 97 ADSL Specifications”; a router that supports DSL).

Regarding claim 24, wherein the broadband modem comprises a cable modem (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for the small offices"; broadband modem comprises a cable modem).

Regarding claim 26, the system wherein the memory comprises instructions operable to direct the processor to broadcast the time information to each of the plurality of home network device nodes (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 4 "Tabel 2 Cisco SOHO 90 Series Hardware Specification"; page 5 "Table 4: Protocols and Features Supported by Cisco SOHO 90 Series Routers"; network time protocol is supported by the router as a client and server, therefore the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes).

Regarding claim 27, the system further comprising a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) operable to receive a request for the time information from each of the home network device nodes. (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a router that is a web server, therefore contains a http daemon, that recognizes network time protocol synchronization requests).

Deeths more specifically discloses:

Regarding claim 14, communicating timing information without being prompted by a request from any of the home network device nodes (see Deeths; page 7 “Types of Clients and Servers”; “Broadcast/multicast server – An NTP server can also operate in a broadcast or multicast mode. Both work similarly; broadcast servers send periodic time updates to a broadcast address, while multicast servers send periodic updates to a multicast address. Using broadcast packets can greatly reduce the NTP traffic on a network, especially for a network with many NTP clients”; page 7 “Types of Clients and Servers”; “Broadcast/multicast client – An NTP broadcast or multicast client listens for NTP packets on a broadcast or multicast address. When the first packet is received, it attempts to qualify the delay to the server in order to better quantify the correct time from later broadcasts. This is accomplished by a series of brief interchanges where the client and serer act as a regular (non-broadcast) NTP client and server. Once these interchanges occur, the client has an idea of the network delay and thereafter can estimate the time based only on broadcast packets. If this interchange is not desirable, it can be disabled using NTP’s access control features." thus a disclosure of a broadcast server which “send periodic time updates to a broadcast address” and broadcast client which “listens for NTP packets on a broadcast or multicast address” therefore a server communicating timing information without being prompted by a request from a home network device (i.e. client) which listens to broadcasts from a server).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Cisco SOHO 90 Series Secure Broadband Routers Data Sheet, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible and simplifying the network infrastructure node complexity.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Deeths, thereby creating satisfying the critical need for synchronized time in today's network environment (see Deeths; page 1 "Introduction"); using NTP which is a good choice for time synchronization in a variety of circumstances (see Deeths; page 3); and using a time protocol what is designed specifically for Internet environments (see Deeths; page 3); and using broadcast packets can greatly reduce the NTP traffic on a network, especially for a network with many NTP clients (see Deeths; page 7).

Hodge discloses:

Regarding claim 28, a method of adjusting a remote time keeping device system (see Hodge et al.; Abstract; a time synchronization method, adjusting a remote time keeping device system), comprising: making a remote time adjustment service available to a subscriber of a data service (see Hodge et al.; Abstract; col. 1 lines 5-8; col. 2 lines 26-65; timing information is provided in communications networks) communicatively coupling a service provider network node with a piece of customer premises equipment (CPE) associated with the subscriber (see Hodge et al.; Figure 1; col. 4 lines 31-52; col. 7 lines 5-19; a network provider network providing timing information to the customer premise equipment), receiving a request for time information communicated from the piece of CPE via a communication link at least partially interconnecting the service provider network node and the piece of CPE (see Hodge et al.; col. 2 lines 27-65; col. 4 lines 36-41; time server supplies time information to customer premise equipment through links, therefore the time server responding to requests for time information from the CPE's) maintaining time information representing a Coordinated Universal Time value in a memory (see Hodge et al.; col. 1 lines 5-8; invention provides universal time information, therefore Coordinated Universal Time values); and outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information (see Hodge et al.; col. 2 lines 27-65; col. 4 lines 36-41; time server supplies time information to customer premise

equipment through links, therefore IP packets containing universal time information are transmitted through links); wherein a plurality of device nodes includes at leas one of an alarm system, an alarm clock, and an oven (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore a clock equipment connected to the network on the customer premises; Applicant's specification on pages 6 and 7 define computer premise equipment (CPE) as "may include home appliances, kitchen appliances, consumer electronic devices, computers, microwave ovens, conventional ovens, video recorders, alarm clocks, air conditioning systems, heating systems, alarm systems, and voice over Internet Protocol (VoIP) telephones" thus one of ordinary skill at the time of the invention would use the term CPE to describe such equipment that resides on the customer premise and is connected to the network. Therefore, by the definition of CPE Hodge does disclose Voice over Internet Protocol (VoIP) telephones.).

Regarding claim 29, further comprising providing the subscriber with the piece of CPE (see Hodge et al.; col. 1 lines 27-65; col. 4 lines 37-41; col. 7 lines 15-19; Figure 1; subscriber has computer premise equipment), the piece of CPE comprising a service provider network interface and a home network interface (see Hodge et al.; col. 1 lines 27-65; col. 4 lines 37-41; col. 7 lines 15-19; Figure 1; customer premise equipment is connected to network provider, therefore comprising a service provider network interface to connect).

Regarding claim 34, further comprising: outputting a Network Time Protocol (NTP) request to a NTP server (see Hodge et al.; Figure 1; col. 1 lines 5-8; col. 2 lines 27-65; col. 4 lines 37-41; the computer premise equipment, therefore a router such as Cisco SOHO 90 Series Secure Router which is a NTP client and server, receives NPT requests and serves other computer premise equipment); receiving a response from the NTP server including a different Coordinated Universal Time value (i.e. universal time information; see Hodge et al.; col. 1 lines 5-8; universal time information is received from the provider time server) and updating the time information in the memory to represent the different Coordinated Universal Time value (see Hodge et al.; col. 2 lines 27-65; col. 7 lines 15-39; time synchronization between devices, thus a memory is updated to represent the universal time value);

Hodge et al. does not specifically disclose:

Regarding claim 28, making a remote time adjustment service available to a subscriber of a broadband data service; the piece of CPE comprising a broadband modem device; receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE; outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information.

Regarding claim 29, the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from one of the plurality of device nodes of the home network via the home network interface.

Regarding claim 31, comprising a Point to Point over Ethernet (i.e. PPPoE: Point to Point Protocol over Ethernet) client executing on the processor.

Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses:

Regarding claim 28, making a remote time adjustment service available to a subscriber of a broadband data service (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; the router provides broadband internet service, thus data service, while providing time adjustment service through the network time protocol); the piece of CPE comprising a broadband modem device (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”; the broadband router, a piece of computer premise equipment (CPE), router comprises a broadband modem device); receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE (see Cisco SOHO 90 Series Secure Broadband

Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; a router, thus a piece of CPE, that has a broadband communication link used for connecting to a service provider to receive timing information at the router, a piece of CPE); outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; router supports the NTP protocol, therefore does NTP communication, that contains time information, through the broadband communication link); .

Regarding claim 29, the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from one of the plurality of device nodes of the home network via the home network interface (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 “Easy Set Up and Deployment”; page 3 “Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series”; page 5 “Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers”; page 5 “Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers”; a home and small office router that is computer premise equipment, therefore equipment located on the customer network

premises, such as web server, as a result contains a http daemon, that recognizes network time protocol adjustment information).

Regarding claim 31, comprising a Point to Point over Ethernet (i.e. PPPoE: Point to Point Protocol over Ethernet) client executing on the processor (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 4 "Table 2 Cisco SOHO 90 Series Hardware Specifications"; page 4 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a processor that executes PPPoE client functionality).

Deeths more specifically discloses:

Regarding claim 28, broadcasting time signals form the piece of CPE (i.e. NTP server) to nodes of a home network (i.e. NTP clients) without being prompted by a requesting device of the home network (see Deeths; page 7 "Types of Clients and Servers"; "Broadcast/multicast server – An NTP server can also operate in a broadcast or multicast mode. Both work similarly; broadcast servers send periodic time updates to a broadcast address, while multicast servers send periodic updates to a multicast address. Using broadcast packets can greatly reduce the NTP traffic on a network, especially for a network with many NTP clients"; page 7 "Types of Clients and Servers"; "Broadcast/multicast client – An NTP broadcast or multicast client listens for NTP packets on a broadcast or multicast address. When the first packet is received, it attempts to qualify the delay to the server in order to better quantify the correct time from

later broadcasts. This is accomplished by a series of brief interchanges where the client and serer act as a regular (non-broadcast) NTP client and server. Once these interchanges occur, the client has an idea of the network delay and thereafter can estimate the time based only on broadcast packets. If this interchange is not desirable, it can be disabled using NTP's access control features." thus a disclosure of a broadcast server which "send periodic time updates to a broadcast address" and broadcast client which "listens for NTP packets on a broadcast or multicast address" therefore a server communicating timing information without being prompted by a request from a home network device (i.e. client) which listens to broadcasts from a server).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Cisco SOHO 90 Series Secure Broadband Router Data Sheet, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible while allowing for advanced management capabilities (page 1 "Affordable, secure, easy-to-use, broadband access for small offices").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al., as taught by Deeths, thereby creating satisfying the critical need for synchronized time in today's network environment (see Deeths; page 1 "Introduction"); using NTP which is a good choice for time

synchronization in a variety of circumstances (see Deeths; page 3); and using a time protocol what is designed specifically for Internet environments (see Deeths; page 3); and using broadcast packets can greatly reduce the NTP traffic on a network, especially for a network with many NTP clients (see Deeths; page 7).

3. Claims 5, 22 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge et al. (U.S. 6,438,702 B1) in view of Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of Deeths ("Using NTP to Control and Synchronize System Clocks"), and further in view of Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T, 2002, Cisco Systems, all pages.

Hodge and Cisco SOHO 90 Data Sheet do not specifically disclose:

Regarding claim 5, the router comprises a wireless router embodying an 802.11 (x) access point.

Release Notes for Cisco Aironet 1200 discloses:

Regarding claim 5, the router comprises a wireless router embodying an 802.11 (x) access point (see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 4 "Limitations and Restrictions"; a wireless access point supporting IEEE 802.11 links).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet by the router comprises a wireless router embodying an 802.11 (x)access point, as taught by Release Notes for Cisco Aironet 1200 Series

Access Points Running Firmware Version 12.00T, thereby simplifying the network infrastructure (i.e. topology) by replacing two nodes with one node.

Hodge and Cisco SOHO 90 Data Sheet do not specifically disclose:

Regarding claim 22, wherein the home networking mechanism comprises an 802.11 (x) access point.

Release Notes for Cisco Aironet 1200 disclose:

Regarding claim 22, wherein the home networking mechanism comprises an 802.11 (x) access point (see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 4 “Limitations and Restrictions”; a wireless access point supporting IEEE 802.11 links).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet by wherein the home networking mechanism comprises an 802.11 (x) access point, as taught by Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T, thereby simplifying the network infrastructure (i.e. topology) by replacing two nodes with one node.

Hodge and Cisco SOHO 90 Data Sheet disclose:

Regarding claim 30, wherein the piece of CPE is an integrated home networking device comprising the broadband modem device, the HTTP daemon,

a processor, a router (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 “Affordable, secure, easy-to-use, broadband access for small offices”; page 4 “Table 2 Cisco SOHO 90 Series Hardware Specifications”; page 5 “Table 4 Protocols and features Supported by Cisco SOHO 90 Series Routers”; the router comprises a broadband mode, web server, thus a http daemon, and a processor), however

Hodge and Cisco SOHO 90 Data Sheet do not specifically disclose:

Regarding claim 30, a local area wireless transceiver.

Release Notes for Cisco Aironet 1200 disclose:

Regarding claim 30, a local area wireless transceiver (see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 2 “Introduction”; a local area wireless transceiver).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al. and Cisco SOHO 90 Series Secure Broadband Routers Data Sheet by a local area wireless transceiver, as taught by Cisco Aironet 1200 Series Access Point Running Firmware Version 12.00T, thereby simplifying the network infrastructure (topology) by integrating the components.

4. Claims 32 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge et al. (U.S. 6,438,702 B1) in view of Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages in view of Deeths ("Using NTP to Control and Synchronize System Clocks"), and further in view of van der Kaay et al. (U.S. 6,393,126 B1)

Hodge and Cisco SOHO 90 Data Sheet do not specifically disclose:

Regarding claim 32, maintaining a repository comprising information about the subscriber, the information indicating that the subscriber (i.e. client) subscribes to the remote time adjustment service; considering the information in connection with generating an; and including a charge for the remote time adjustment service in the invoice.

Van der Kaay et al. more specifically discloses:

Regarding claim 32, maintaining a repository comprising information about the subscriber (see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers), the information indicating that the subscriber (i.e. client) subscribes to the remote time adjustment service (see van der Kaay et al.; col.. 15 lines 39-49; a client is billed, therefore the client

subscribes to the remote time adjustment service); considering the information in connection with generating an invoice (i.e. billing report) for the subscriber (see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers); and including a charge for the remote time adjustment service in the invoice (see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers' remote time adjustment service).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al. and Cisco Series Secure Broadband Router Data Sheet by maintaining a repository comprising information about the subscriber, the information indicating that the subscriber (i.e. client) subscribes to the remote time adjustment service; considering the information in connection with generating an; and including a charge for the remote time adjustment service in the invoice, as taught by Van der Kaay et al., thereby facilitating the operation of the invention as an on-going business concern (col. 15 lines 39-49).

Hodge and Cisco SOHO 90 Data Sheet do not specifically disclose:

Regarding claim 33, Hodge et al. and Cisco Series Secure Broadband Router Data Sheet does not specifically disclose further comprising making the remote time adjustment service available to a plurality of subscribers.

Van der Kaay et al. more specifically discloses:

Regarding claim 33, comprising making the remote time adjustment service available to a plurality of subscribers (i.e. clients; see van der Kaay et al.; col. 15 lines 39-49; speaks of a plurality of clients, thus the remote time adjustment service is available to a plurality of subscribers).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al. and Cisco Series Secure Broadband Router Data Sheet by further comprising making the remote time adjustment service available to a plurality of subscribers, as taught by Hodge et al. and Cisco Series Secure Broadband Router Data Sheet, thereby creating facilitating the operation of the invention as an on-going business concern (col. 15 lines 39-49).

3. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge et al. (U.S. 6,438,702 B1) in view of Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages and further in view of Deeths ("Using NTP to Control and Synchronize System Clocks"), and further in view of Cisco SOHO 71 Broadband Router Data Sheet.

Hodge, SOHO 90, in view of Deeths, do not specifically disclose:

Regarding claim 3, wherein the home network node further comprises a broadband modem (i.e. to provide a network connection).

Cisco SOHO 71 Broadband Router Data Sheet discloses:

Regarding claim 3, wherein the home network node further comprises a broadband modem (i.e. to provide a network connection; see Cisco SOHO 71 Broadband Router Data Sheet; page 1 "Table 1 Benefits Overview of Cisco SOHO 71 Broadband router"; a broadband router that acts as a modem).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge, SOHO 90, in view of Deeths, as taught by Cisco SOHO 71 Broadband Router Data Sheet, thereby allowing for secure internet access with manageable stateful firewall (see SOHO 71; page 1); for simple setup (see SOHO 71; page 1); and for proven reliability and manageability with IOS software (see SOHO 71; page 1); and furthermore allowing multiple users to share DSL and cable

connections with a single IP address, offering business-class protection from hackers with always-on broadband connections, supporting teleworkers or multiple agent using VPN client software on their PCs, no technical users can easily setup the router and customize advanced features, and provide business-class operating system for centralized network management, remote troubleshooting, and proven reliability (see SOHO 71; page 1 “benefit”).

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM DUDA whose telephone number is (571)270-5136. The examiner can normally be reached on Mon. - Fri. 9:30 a.m. - 7:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272 - 3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADAM DUDA/
Examiner, Art Unit 2416

/KWANG B. YAO/
Supervisory Patent Examiner, Art Unit 2416